Artificial Intelligence in Human Resource Management: A game changer in talent acquisition

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Abstract

Artificial intelligence (AI) seems to be everywhere these days and has become a part of our daily life. Talent acquisition is a critical aspect of human resource management. It is a fast-growing area for AI since a recruitment process stores significant amounts of data such as resumes, interview notes, assessments results, and compensation details for jobs and candidates. AI is transforming hiring by assisting recruiters in different talent acquisition processes, from identifying the right talent to screening and assessing specific behavior of candidates.

AI is useful in streamlining and automating workflow in talent acquisition processes. It certainly helps organizations engage with the appropriate job candidates faster. This research suggests a decision methodology on where and when to use AI in talent acquisition to assist organizations in their human resource investment decisions.

How does AI help?

Process	Problem	How AI helps
ATTRACT	Job descriptions/ads are not attractive for candidates	AI revises job descriptions/ads to attract more qualified candidates and **remove gender and age biased language** from job descriptions.
ENGAGE	Recruiters do not have enough time to keep candidates engaged in the process while there is a serious competition to attract top talents	AI recruiter/chatbot **schedules interviews** and helps human recruiters to prioritize their time with candidates most likely to succeed. It also **guides candidates** through an application process with sequenced questions.
SCREEN	Recruiters spend long hours to screen high number of resumes and their screening might be biased	AI does **automated resume screening** and it grades candidates. AI can be programmed to ignore personal information such as candidate's age, race, and gender.
ASSESS	Interviews take long time and can be unstructured and unstandardized which do not help to predict potential and performance of candidate in a reliable way	AI can be programmed to set certain interview questions and **record video interviews** with candidates. AI can rate emotions, facial expressions, vocal tone, and posture without any bias. AI can also assess candidates through **online games designed based on machine learning algorithms**

AI helps to recruiters at some extent in each part of talent acquisition processes and shortlists selected candidates based on job criteria. However, companies always organize face to face interviews with candidates to make final hiring decisions among shortlisted candidates.

A success story : Unilever

AI based hiring started in Unilever North America and took effect in 68 countries. It was conducted in 15 languages and involved a total of 250,000 applicants (only for college recruitments).

Unilever shared its North American results from July 2016 to June 2017:

Figure.1

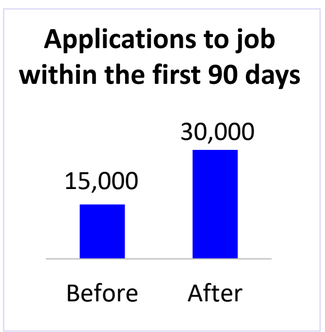


Figure.2

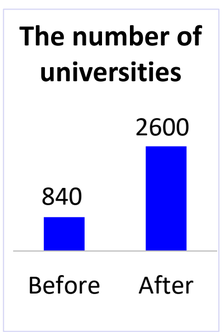


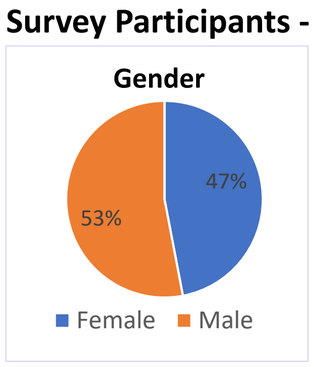
Figure.3

- A cumulative **50,000 hours of candidates' time** was saved. Recruiters' time spent reviewing applications decreased by 75%.
- **The rate of offers** to candidates who made it to the final round increased to **80% from 63%,** and **the acceptance rate** of these offers increased to **82% from 64%.**
- **The recruiting cost** decreased by **25%.**

Candidate Experience in AI based Video Interviews

Research Methodology: The data for this research derives from a quantitative analysis of the user data of almost 80,000 interviews from 3,800 randomly selected recruitment campaigns conducted by 615 companies on the Sonru system (An automated video interview platform) between January 2017 and September 2018.

Survey Participants - Demographics



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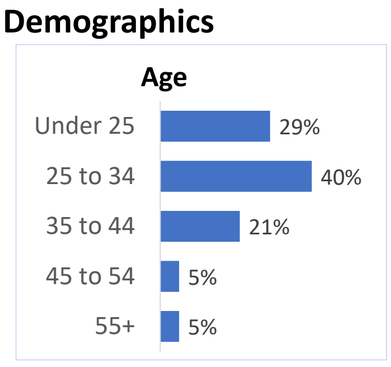

Figure.5

- There are representations from each continent (APAC:46%, EUR: 41%, MEA: 9%, NAM: 4%)

Pre-Video Interview Survey

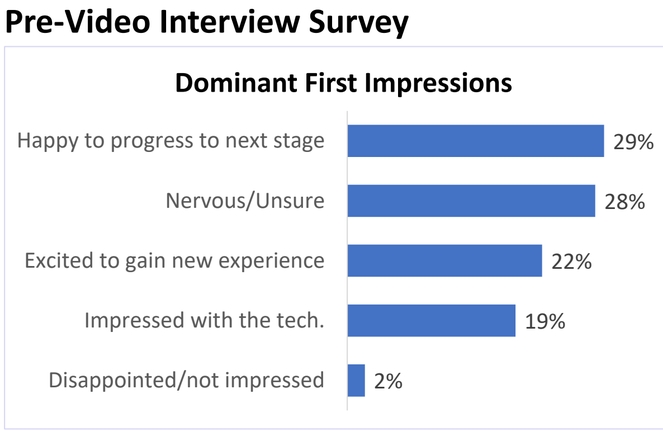

Figure.6

Post-Video Interview Survey

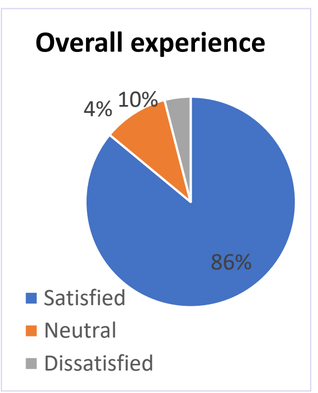

Figure.7

Figure.8

These results show that there is a high level of satisfaction among candidates who experienced an automated video interview for the first time. Although there can be some level of anxiety about experiencing something new, candidates find this practice more convenient and appreciate to not take time off from their current work.

Potential Downsides of AI

- ❑ The idea to know that your facial expressions are analyzed to determine your fit to the job can **create stress on candidates**. They may not behave as themselves during the interview. They may even not apply for the job because of this reason.
- ❑ If **the design of AI tools** is not done properly, it does not create a positive candidate experience and process improvement. (For example; chatbots/AI recruiters may not ask the right questions to candidates or many not answer candidates' questions correctly.)
- ❑ AI tools produce **big data**. If companies do not have capabilities and processes in place to manage big data, then they can not leverage the power of the data to make right hiring decisions.
- ❑ AI is capable of learning things constantly. If there are some biased past data in the system, **AI can learn bias too.**

Recommendation

In general, AI is useful in streamlining and automating workflow in talent acquisition processes. It certainly helps organizations engage with the appropriate job candidates faster. However, there will be still a need for humans to make final hiring decisions.

This research suggests a decision matrix on where and when to use AI in talent acquisition to assist organizations in their human resource investment decisions.

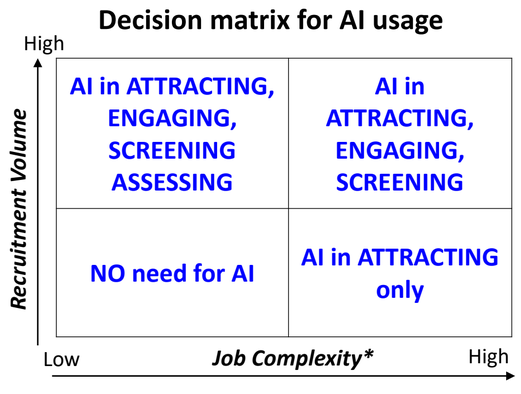

Figure.9

**AI tools are not advanced yet to assess skills successfully for highly complex jobs.*

Interesting questions to be explored further:

- If a candidate has a physical issue which affects his/her facial expressions, then how can AI algorithm evaluate that candidate fairly?
- When will AI have an auto-translation system and interview in local languages?